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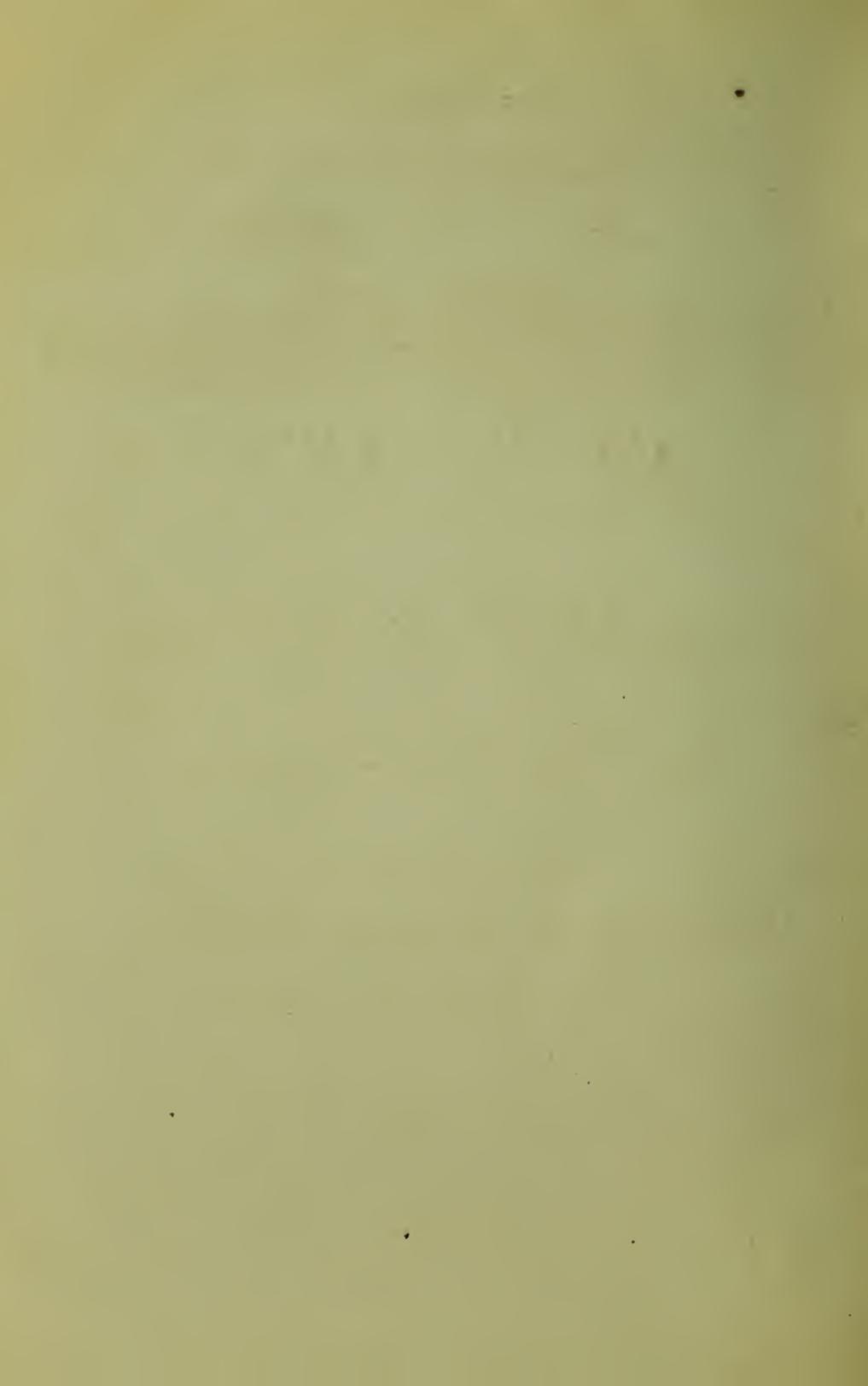
No. 9

BULLETIN
of the
STATE UNIVERSITY
of
KENTUCKY

COLLEGE
of
AGRICULTURE

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The College of Agriculture
State University of Kentucky



GENERAL VIEW OF FRONT CAMPUS

The University Course
OF
FOUR YEARS IN AGRICULTURE

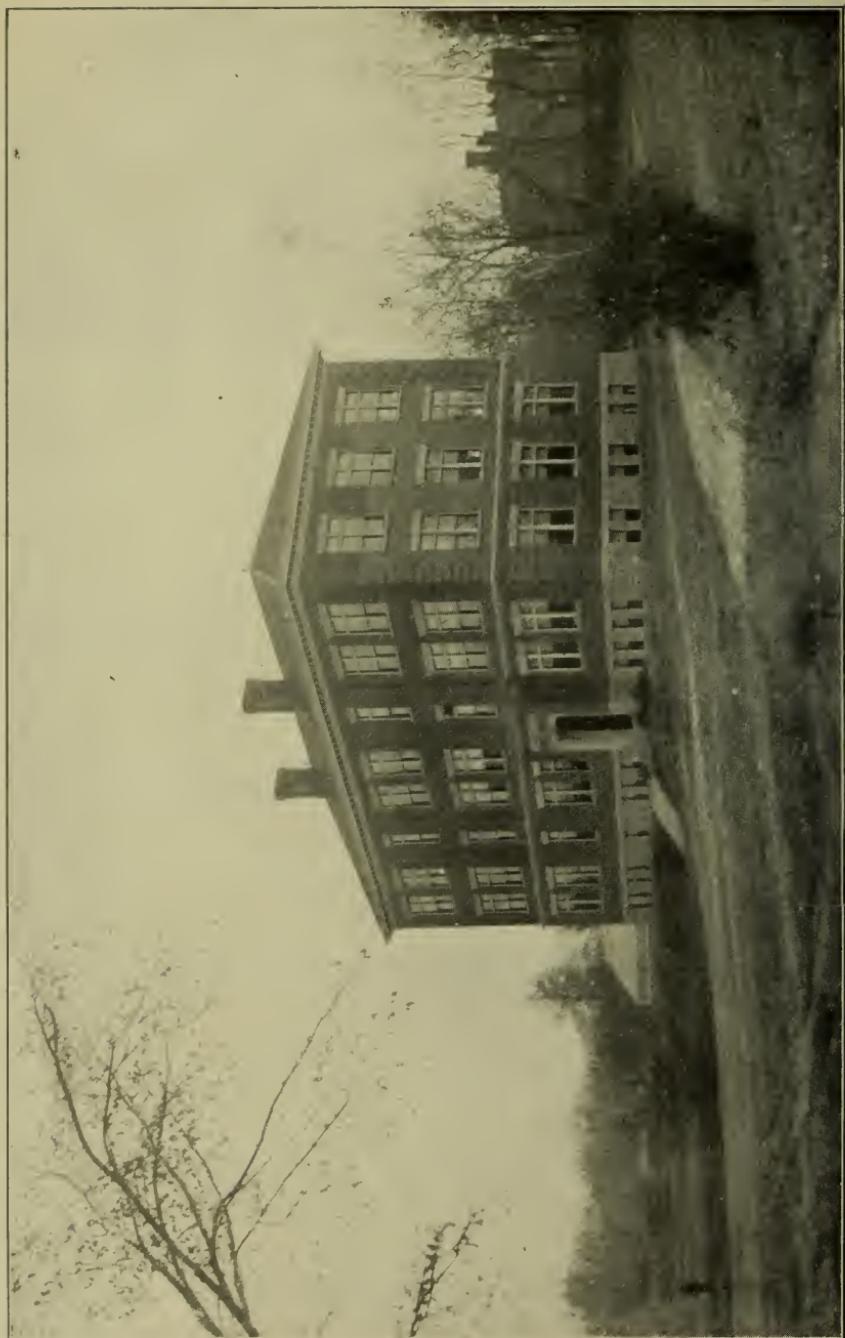
The Two Years' Course

Announcement of
The Short Winter Course

For the Ten Weeks Beginning
on the First Tuesday in January, 1910

PUBLISHED BY THE STATE UNIVERSITY
OF KENTUCKY, LEXINGTON

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Lexington, Ky.



AGRICULTURAL HALL (South Wing)

THE COLLEGE OF AGRICULTURE

FACULTY AND OTHER OFFICERS

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George Harold Noyes, A. B.
Forecaster U. S. Weather Bureau. Lecturer on Meteorology.

David C. Frazee.
Business Agent.

THE COLLEGE OF AGRICULTURE



THE great educational movement seen during recent years in the interests of the farming communities of our country is one of the most significant of our times. It is clearly recognized that this movement has resulted largely from the establishment of the Agricultural and Mechanical or "Land-grant" colleges and the Experiment Stations.

These institutions have engaged jointly in teaching and in making investigations which have enlarged our knowledge of many agricultural problems, and they have also been largely instrumental in systematizing and publishing the great body of facts resulting from these investigations, and from the experiences of generations of practical farmers.

The fundamental purpose of the College of Agriculture is to give instruction of both a scientific and practical character in the very diverse subjects which are most concerned in the varied lines of agricultural industry.

It is coming to be seen by all intelligent people that success in farming, as in any other occupation, can come only as a result of clear, definite knowledge of the subject. There are many ways of gaining such knowledge; it may come partly thru long personal experience, often a very costly way of getting it; much of it may be acquired thru constant reading of agricultural papers, and attendance upon farmers' institutes, when these are combined with careful observation at home.

It is the belief of many who have given it trial, that a young man can get much of this training and acquaintance with the facts of agricultural science, more easily and with less expense, at an agricultural college, than by his experience on the farm alone.

It is a fact beyond question that a large proportion of young men all over the country who have taken courses of instruction in the Agricultural Colleges have demonstrated their ability to promptly become leaders in the occupation of farming.

The other fields of work open to the agricultural college graduate are numerous. He may take up college or experiment station work; the United States Department of Agriculture is employing thousands of trained men in its many lines of work; packing houses, fertilizer and farm machinery companies are calling for agricultural graduates; many states have established pure food, fertilizer and nursery inspection laws, and trained men are needed to fill the positions made necessary by such laws. Agricultural papers feel the need of special agricultural training for the members of their editorial staffs and the farmers' institute worker is better qualified with such training.

A considerable number of our own graduates are thus engaged in College and Experiment Station positions, several are in government

service in the Philippine Islands, while others have been called to occupy positions as government experts in Ireland, and in South Africa.

As is true in most other states, the young farmer in Kentucky who is looking to a course in the Agricultural College may choose from several courses of agricultural study from which a selection may be made in accordance with his previous educational training; the time and money at his command for purposes of education; and the objects which he has in view.

Of those who take one of the shorter courses practically all return to the farm and directly apply the instruction and training given at the college to the practical problems of farm management.

EQUIPMENT

The facilities for giving agricultural instruction in the Kentucky College have, as in numerous other states, been remarkably developed within the past five years.

Agricultural Hall The most notable addition has been the erection of the new building for agriculture which is one of the most attractive and commodious upon the University grounds and second to none in the details of its equipment for instruc-



AGRICULTURAL READING ROOM

tional purposes. It is located upon the southwest corner of the campus near South Limestone Street and was erected in 1907-08. It is constructed of pressed brick with Bedford stone trimmings, is forty-five by one hundred feet in size, three stories in height above a roomy basement and is covered with a tile roof. The basement is occupied with a large labora-

tory for farm machinery, and another for farm mechanics; seed room, planting and propagating room, boiler room, etc. The farm machinery laboratory is well supplied with such farm implements as the binder, planters, cultivators, harvesters, etc., with which the student has practical training in dismantling and assembling the parts. The farm mechanics room is supplied with an excellent equipment of benches and tools for wood work. The plant propagating room, which adjoins the greenhouse, is provided with benches, seed flats, grafting, pruning and spraying appliances and various other forms of horticulture equipment.

The first floor contains the office of the Dean and the department library; the general and advanced plant laboratories and horticultural lecture room. The laboratories are admirably equipped with individual tables, microscopes, and other appliances for plant study; the lecture rooms with folding opera chairs with tablet arms, with lantern for stereopticon pictures and microscope attachment for projection upon the screen of microscopic objects.



LECTURE ROOM, SOIL PHYSICS

The second floor contains the office and lecture rooms of the professors of animal husbandry and agronomy, the general agricultural laboratory and the soil physics laboratory. A handsomely appointed room provided with fireplace and attractive mission furnishings, affords a pleasant reading and study room for the agricultural students and a meeting place for the Agricultural Society. A large list of the best agricultural periodicals are constantly kept on file in this room and are freely available to the students.

The third floor contains a photographic laboratory with dark rooms;

an agricultural museum and drawing room, and an assembly room for meetings of the Grange and other farmers' organizations.

Adjoining the building upon the rear is an iron frame greenhouse of the most approved modern construction, with cement walks and iron and tile benches, and with a hot water heating system. This greenhouse is utilized for the purposes of instruction in plant physiology, soil physics and in horticultural operations. Other greenhouses upon the University grounds provide additional supplies for botanical instruction.

While the Agricultural Building is in itself a large structure, it is designed as a wing with a view to extensive additions of a central main building and an opposite corresponding wing, which it is believed the rapidly growing demand for agricultural education in Kentucky will require in the near future.

Other Facilities for Study The office and laboratory building of the Kentucky Agricultural Experiment Station, a department of the University, is located about three minutes walk to the south of the main University campus, and a short distance away is the University farm, consisting of 243 acres of the best Blue Grass land. This farm, while it is under the management of the Director of the Experiment Station and is used mainly for the experimental work of the Station, is also available for supplementary and illustrative instruction. A tract of several acres on the farm has moreover been specifically set apart by the Director for the uses of the staff of the College of Agriculture for instructional purposes. A large herd of Jersey cattle housed in a commodious and well equipped dairy barn; a new piggery stocked with



PIG FEEDING LOT, UNIVERSITY FARM

problems and numerous other studies designed to train the student to solve which he meets upon his home farm.

For the purpose of horticultural instruction there is a tract of land planted with various orchard trees, grapes and small fruits, and other

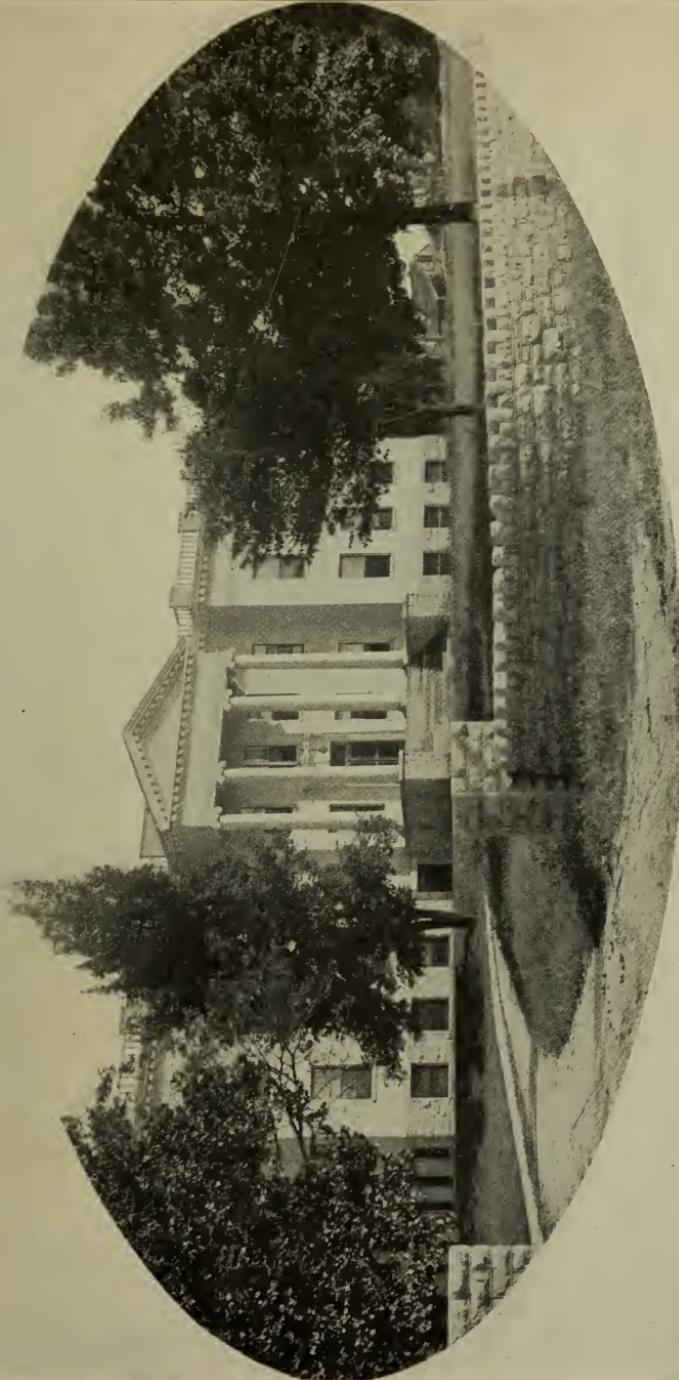
Berkshire swine, and various plots of field, forage and garden crops, with numerous other experimental studies in progress all the time, afford stimulating and interesting subjects for inquiry thruout a student's course. The plots especially set apart for college instruction will be devoted to studies of methods of cultivation, soil management, seed selection, drainage prob-

plantings are made from year to year with a view of providing practice in planting, pruning, budding, grafting, fruit packing, marketing, etc. Other plots are devoted to market garden crops for providing corresponding facilities in this important division of horticulture.

The extensive live stock and other agricultural interests of the unrivalled Bluegrass country immediately surrounding Lexington may fairly be considered a vastly enlarged field of laboratory inquiry for all students of agriculture. Frequent visits are made to the various farms in this vicinity, and their owners and managers manifest a most cordial hospitality and a willing co-operation in promoting the cause of agricultural education in the institution.



ADMINISTRATION BUILDING, STATE UNIVERSITY



KENTUCKY AGRICULTURAL EXPERIMENT STATION, OFFICE AND LABORATORY BUILDING

THE UNIVERSITY COURSE IN AGRICULTURE

The full course in the College of Agriculture requires four years for its completion and is of the same rank as other University courses. It leads to the degree of Bachelor of Science in Agriculture.

For entrance to this course it is required that the student shall have completed a full high school course or its equivalent, based upon the completion of fifteen units of study, each requiring the pursuit of a subject for five hours a week for one school year of not less than thirty-four weeks.

Ten of these units must be as follows:

Algebra	1½
Geometry (Plane)	1
Geometry (Solid)	½
History	1
Language (English)	3
Language (One Ancient or Modern).....	2
Physics	1

The remaining five units may be selected at will from the following subjects:

Astronomy	½
Botany	½
Chemistry	1
Civics	½
Drawing	½
History	1
History (American)	½
Language (Ancient or Modern)	3
Manual Training	½
Physical Geography	½
Physiology	½
Trigonometry	½
Zoology	½

A student may be admitted either by examination or by certificate from an accredited school as having completed the fifteen units of preparatory study. A large proportion of the high schools of the State are entitled to give certificates to their graduates which admit them to the Freshman class of the College of Agriculture without examination. A student who does not present such a certificate is required to take an examination for admission to the Freshman class, based upon these requirements of fifteen units, in agreement with the requirements for admission to the Freshman class in other colleges of the University.

The rates of tuition and other fees are identical with those of the candidate for the degree of B. S. in the College of Arts and Science, as follows:

Tuition, per year	\$25.00
Matriculation fee	5.00
Gymnasium fee	5.00
For each laboratory	5.00
Washing, about	10.00
Room and furniture	20.00
Uniform	16.00
Books, about	10.00
Board in clubs per week, about	2.00
Board in families per week	\$3.00 to 4.00

All students are required to make a deposit of \$10 at the beginning of each year to cover any damages that may be done to the property of the University. This is refunded at the close of the year, less any charge assessed against the depositor.

Reduced Cost to County Appointees Agricultural students, however, share with others in the county appointee system. Each county in the State is, by law, entitled to select and send to the State University one or more properly prepared students free of charge for tuition, one appointment being made for 4,500 white pupils or less within the common school age, and for each 3,000 white pupils over 4,500 one additional appointment, these appointments being made by the county superintendent upon competitive examinations.

County appointees also receive room rent, matriculation and gymnasium free, and, upon certain conditions, their traveling expenses to and from the college, all of which greatly reduce the cost of attendance for the successful candidates.

The appointments are made by the county superintendent of schools where the pupils reside and should be secured between the first day of June and the first day of August preceding the beginning of the college year. For further information regarding the competitive examinations, the prospective student should consult his county superintendent.

The full course in agriculture is designed for those who desire to take a thoro college training, combining liberal culture with specialization in those branches of study directly related to agricultural pursuits. It is arranged primarily to meet the needs of the young man who is familiar with the common operations usually shared in by one who has been reared upon the farm. Such men constitute a large percentage of those who matriculate in Agriculture, and the time of classes, therefore, is not consumed in training under-graduates in the commoner manual operations of farm life.

The young man from the city, who expects to engage in agricultural pursuits, is therefore advised to supplement his college course as fully as possible by practical experience upon one or more well-managed farms. This can often be advantageously done during the summer vacations.

It should not be understood, however, that the practical operations

of the farm are ignored. On the contrary, great care and considerable time are devoted to giving instruction in many highly important operations, which involve special knowledge or a high degree of skill.

Provision is made for the selection by the student of a major subject for the latter part of his course, thus permitting him, within certain limits, a choice of studies during the Junior and Senior years.

**SCHEDULE OF STUDIES FOR THE FOUR YEARS'
COURSE IN AGRICULTURE**

Freshman Year.	Hours.	Hours.	Hours.
	Fall term.	Winter term.	Spring term.
English,	3	3	3
Mathematics,	5	5	5
German,	3	2	2
Chemistry Lectures,	..	4	3
Chemistry Laboratory,	..	3	3
Freehand Drawing.	2	2	..
Elementary Botany,	..	..	3
Physiology,	3	..	..
History,	2	2	2
Sophomore.			
Zoology,	2	2	..
Zoology Laboratory,	3	3	..
Embryology,	..	..	3
Physics,	3	2	2
Botany Lectures,	1	2	2
Botany Laboratory,	3	3	2
Soil Physics,	3	..	..
Geology,	2	2	2
Agronomy-Cereals,	..	3	..
Plant Culture,	..	2	..
Fruit Culture,	..	..	3
Agronomy-Forage Crops,	..	..	2
Surveying,	..	..	2
Junior.			
Study of Breeds,	3	2	..
Do. Laboratory,	1	..	..
Animal Nutrition,	..	3	3
Farm Equipment,	3	..	..
Farm Equipment, Lab.,	1	..	..
Farm Crops (Advanced),	..	..	2
Veterinary Science,	..	3	..
Plant Histology,	3	..	..
Plant Physiology and Pathology,	..	..	3
Entomology,	2	3	2
Pomology,	2	..	..
Economics or Sociology,	2	2	3
Dairying,	..	..	..
Senior.			
Principles of Breeding,	2	..	..
Do. Laboratory,	1	..	..
Logic,	3	..	..
Metaphysics,	..	3	..
Ethics,	..	..	3

The remainder of the Senior hours are elective and are arranged at the beginning of the year by conference with the Dean.

THE TWO YEARS' COURSE IN AGRICULTURE

While it is felt that the four years' course in Agriculture is none too long a course of preparation for those who expect to engage in agricultural pursuits, it is clearly recognized that there are many young men whose circumstances make it impossible for them to devote to their education as large an amount of time or money as is involved in the completion of a full college course.

It is believed that an earnest young man who desires to excel in his chosen occupation of farming may be greatly benefited by a less extended training in the Agricultural College.

Applicants for admission to this course must be at least eighteen years of age, and unless more than twenty-one years of age, must pass an examination in Arithmetic, Geography, Grammar, and United States History, or bring High School or other satisfactory certificates for these branches.

Applicants who are over twenty-one, are admitted without examination, on trial, provided they can write a creditable letter, can carry on ordinary arithmetical operations, and give evidence by their credentials and personal bearing of having a serious purpose in entering the course.

It should be clearly understood that this shorter course does not lead to a degree, and students are advised, if possible, to take the four years' course. Nevertheless, to the earnest student who is desirous of giving special attention to the practical study of agricultural education, the course will yield valuable returns. No study taken in pursuing this course will be afterwards credited toward the full course leading to a degree, except with the approval of the College Faculty.

The two years' course is of necessity a somewhat flexible one, varying with the preparation of the individual student, but the following schedule is given to show approximately what will be assigned to the average student.

The conditions relating to matriculation, fees, military drill, gymnasium practice, and other college privileges and duties are the same as those pertaining to full course students.

STUDIES FOR THE TWO YEARS' AGRICULTURAL COURSE

First Year.	Fall.	Winter.	Spring.
Agronomy, Soils,	3	..	..
Zoology,	3	3	..
English,	3	3	3
Drawing,	2	2	..
Farm Equipment,	4	..	..
Physiology.	3	..	..
Agronomy, Cereals,	..	3	..
Chemistry,	..	7	6
Plant Culture,	..	2	..
Agronomy, Forage Crops,	..	..	2
Fruit Culture,	..	..	2
Botany,	..	..	4
Second Year.	Fall.	Winter.	Spring.
Study of Breeds,	4	2	..
Animal Nutrition,	..	3	3
Live Stock Management,	..	..	3
Veterinary Science,	..	3	..
Entomology,	2	3	2
Agronomy,	2	3	..
Economics,	2	2	2
Botany,	4	..	..
Fruit Growing, Garden making,	3	..	3
Road Making.	..	..	2
Dairying,	..	..	3
Home Grounds,	..	..	2
Farm Mechanics,	..	3	..

**EXCURSION TO STOCK FARM. STUDENTS JUDGING HORSES**

THE SHORT WINTER COURSE IN AGRICULTURE



HIS course is designed to meet the needs of young men, farmers and farmers' sons, who cannot afford the time or money required to take the full agricultural or other courses in college, but who yet wish to secure a more thoro preparation for their life work. It emphasizes the practical and business aspects of farming as a means of livelihood.

It is believed that there are many young men upon Kentucky farms who would receive great and lasting benefit from the instruction and practice that is given in such a course, not simply because of the practical information acquired, altho that would well repay the time and money spent for it, but also because they would more fully realize that a knowledge of the principles that underlie the familiar affairs of farm life, is of the greatest importance in the best farm management.

Many a farm boy who has had access to farm papers has already gotten a glimpse of greater possibilities for the old home farm, and wants to learn how to develop these possibilities to the fullest extent, and so make farming his life work.

It is recognized that the time that farmers' sons can devote exclusively to study is often very limited, so it is designed in the ten weeks of this course to give instruction that shall be of the most helpful and practical kind possible.

In order to meet the desire of as large a number as possible and to encourage the growing interest in Dairy Husbandry, the work is arranged along two somewhat distinct lines, including a course in **General Agriculture**, and a second course in which **Dairy Husbandry** is the major study. These two courses will have many subjects in common, but the dairy student will be given a much larger amount of practical instruction in the dairy laboratory. The student pursuing this dairy course will receive instruction in soils and field crops in the same classes with the other Short Course students, and will also enter classes in live stock judging, in which special emphasis will be laid upon the judging and selection of dairy cattle. They will also pursue a course in live stock breeding and the study of the diseases of domestic animals.

ADMISSION

As already explained, the Short Course aims primarily to aid the young man upon the business side of farming, not especially in the direction of academic scholarship; hence there are no examinations for admission as in the longer courses. The applicant, however, must be at least seventeen years of age, and it is essential that he should have had a good common school education, and the more thoro and extensive his general

education has been, the more benefit he will derive from the course. It is particularly important that he should have had good training in English and Arithmetic, as short course students are often seriously handicapped by their deficiencies in these subjects. Those planning to take a winter course are advised to review these subjects before coming to Lexington. It is desirable also that they make application as early as possible, in order that an approximate estimate may be made of the probable number in attendance.

On Arrival Plan to get into the city sometime on Monday January 3d, preferably in the early part of the day.

in Lexington The University is located on South Limestone Street, about three-fourths of a mile from the center of the city, upon the street car line. If you have made no previous arrangements with friends regarding room and board, come directly to the office of the Dean on the first floor of the Agricultural Building, which will be open on that day from 8 A. M. to 6 P. M. for registration. Here there will be a list of the rooms and boarding places which are available, and an assistant will be detailed to help you find satisfactory quarters. The regular class work will begin on the following day, January 4th.

EXPENSES

Tuition is free to residents of Kentucky. Non-residents pay a nominal fee of \$5 for matriculation.

Comfortable rooms can be obtained at 75 cents to \$1.50 per week when two occupy a room together, or at \$1 to \$2 when one person occupies a room alone. Excellent table board can be secured near the college at rates ranging from \$2.25 to \$3 per week.

Students taking the special dairy course will be required to provide themselves with a white cotton suit, the cost being about \$2.

An allowance of \$6 to \$10 should be made for books and various incidental expenses. With economy, therefore, a student can keep his expenses for the entire course of ten weeks down to \$40, plus the railroad fare from his home to Lexington and return.

While in the longer courses it is often possible for a student to find employment with which to pay some part of his expenses, this should not be expected in the ten weeks' course. The season of the year is unfavorable, and the time is too short to make it practicable.

SOCIAL AND RELIGIOUS ADVANTAGES

The students of the College of Agriculture have organized an agricultural society, which meets at regular intervals, for the discussion of live agricultural topics and for social intercourse. The students of the Short Winter Course are earnestly invited by the society to unite with the organization and participate in their meetings.

The order of the Grange also has a local organization here with headquarters in the Agricultural Building, to which many of the college and experiment station officers and agricultural students belong, and any short

course student bringing proper credentials will be welcomed to membership.

The Young Men's Christian Association has an organization at the college, with a pleasant room for reading, games, and social intercourse in Alumni Hall, and holds religious meetings during the week. In this hall also the literary societies have weekly meetings, and will welcome new men.

In the city are Baptist, Catholic, Christian, Episcopal, Jewish, Methodist, and Presbyterian churches, which welcome all students to their services, and the pastors of which conduct many of the daily chapel exercises at the University.

HOW INSTRUCTION IS GIVEN

Instruction in the winter course is given by lectures, by practical exercises in the various agricultural operations which can be conducted in winter, and by frequent class visits to stock farms and to other points of special interest.

The lectures are given mostly by the regular instructors of the department, and an effort is made to give the lectures in as plain and practical a form as possible. Whenever feasible they are illustrated by materials of which they treat, and in some cases by lantern slides, the lecture rooms being provided with first class lantern equipments. Lectures and demonstrations are given from time to time by the officers of the experiment station and by others. The greenhouses, barns, and the various laboratories are used as fully as possible for practical illustrative purposes.

SPECIAL LECTURES

In addition to the work offered by the regular corps of instructors, arrangements are made for securing frequent lectures by men of eminence in the various fields of practical agriculture. While the list of speakers is not yet complete, it will include men noted for their successful experience in general agriculture, horticulture, and the various lines of animal husbandry, and will therefore add very greatly to the interest and practical benefits of the Short Course.

The lectures will be given in the Assembly Room upon the third floor and will usually occur on Friday at 3:30 P. M.

OUTLINE OF SUBJECTS OF SHORT COURSES

I. Botany. (Plant Life on the Farm)

PROFESSOR MATHEWS AND PROFESSOR GILBERT.

In the study of plant life the excellent equipment of the botanical laboratories will be placed at the service of the students of the short course. By the aid of simple and compound microscopes the pupils will study the structure of seeds, roots, stems, leaves, flowers and fruits. The function of each of these organs of the plant will be discussed, and in some cases experiments will be undertaken



to demonstrate certain physiological principles of plant life. Those topics which are of special importance to farmers will receive the fullest consideration, such as germination of seeds, how plants feed, the work of roots and leaves, the office of the inner and outer bark, movements of the sap, the importance of the blossom, cross-fertilization, etc. Some attention will also be given to those low forms of plant life, the fungi, which are the cause of many of the diseases affecting farm and garden crops.

II. Agriculture

PROFESSOR HOOPER AND PROFESSOR ROBERTS.

Soils. The origin and preservation of soils; the sources of soil fertility; the function of bacterial life in the soil; the conservation of soil moisture by soil mulches and in other ways; surface and tile drainage; green manuring. The laboratory studies of soils will be supplemented by observations on the Experiment Station farms and elsewhere. The subject of



LABORATORY. STUDENTS JUDGING CORN

Commercial Fertilizers will be given a somewhat extended discussion in this connection.

Farm Machinery and Implements of Tillage will be given attention in the short course. The implements used for different purposes, and those that in particular should be used more frequently in Kentucky, are studied in reference to their construction, care and draft. Some of the more complicated ones will be taken apart and assembled by the students.

Field Crops. Special attention will be given to a study of the staple crops of our own state, including corn, wheat, hemp, tobacco, and the grasses and other forage crops adapted to Kentucky. Considerable time



STUDYING THE POINTS OF A FINE HORSE



JUDGING THOROUGHBRED SHEEP



JUDGING LIVE STOCK---SHETLAND PONIES

is spent in judging samples of the various grains, especially in the case of corn, of which many ears of the best varieties are studied with reference to the ideal form, and in connection with germination tests.

III. Animal Husbandry (General)

PROFESSOR HOOPER AND ASSISTANT.



Stock Judging. In starting upon this course the students are made familiar with the various market types of horses, cattle, sheep, and swine. The different points of excellence of a perfect animal are considered, followed by a consideration of the adaptation of the different breeds (whether already produced in Kentucky or not) to our conditions, with a discussion of their relative points of merit. In carrying out this study, a carefully prepared score card is used to develop the student's powers of observation and to fix in his mind the best types. Frequent visits are made to the numerous stock farms near Lexington, where the animals are scored, and the methods of management closely studied.

Feeding. This course embraces a study of the theory and practice of animal nutrition: the composition of the animal body and of feeding stuffs; the relative economy of feeds at market prices, and the compounding of rations for horses, beef and dairy cattle, sheep and swine. The feeding operations at the Experiment Station and at farms in the vicinity of Lexington, are used as illustrative material. The course also includes a brief study of the anatomy and physiology of the digestive system of the various domestic animals.

Breeding of Live Stock. The basic principles of breeding animals and the methods to be employed in improving the breeding stock of this state; special problems, such as the influence of environment, of fecundity, of previous impregnations, the possibility of controlling sex of offspring, etc.,—are considered in their relations to the operations of the stock breeder.

Diseases of Live Stock. The common ailments of farm animals, their cause, treatment, and prevention. Special attention is given to contagious abortion, anthrax, hog cholera, tuberculosis, nasal grub and stomach worms of sheep. A brief study is also made of the anatomy of the horse's foot and the proper methods of shoeing.

IV. Farm Dairying

PROFESSOR HOOPER AND ASSISTANT.

The course in dairying is designed to acquaint the students with the practical details which are of importance to every one who operates a dairy farm or a creamery.

The course will include lectures and practical laboratory instruction in the judging and selection of dairy cattle; the compounding of rations for dairy cows; the adaption of dairy barns to the production of sanitary milk and the separation of cream by the use

of the various gravity and centrifugal systems. The student will be made familiar thru frequent practice with the purpose of the Babcock milk tester and with the proper methods of ripening cream for churning. The class will be divided into small sections in order that each may participate in the churning of cream and in the detailed study of the production of first class butter.

During the course visits will be made to the various dairy farms located near Lexington, and careful inspection will be made of the creameries in this part of the state.

Students pursuing the special dairy course will be expected to provide themselves with working suits of white duck as commonly used in the best dairies and creameries.

V. Horticulture

PROFESSOR MATHEWS, PROFESSOR GILBERT AND MR. MOORE.



In the horticultural instruction the time is divided between lectures and practice in the various horticultural operations. In the lectures a brief review is given of the principles of plant structure and growth upon which are based the various horticultural practices. Further attention is then given to the various subdivisions of the subject, as follows:

(a) Pomology or Fruit Growing.

Soils, Location and Planting of fruits are considered with reference to character of soil; the relative value of various slopes and elevations, water and atmospheric drainage; protection from frosts and freezes, and market and transportation facilities.

Propagation of trees, vines and berry plants by seeds, cuttings, layering, budding, grafting, etc.

Tillage of fruit lands in preparation for planting; cultivation of orchards, grapes and berry plantations; cropping orchards; cover crops; mulching and other methods of soil management relating to the conservation of soil moisture, the ripening the wood, inducing growth, or promoting fruitfulness.

Pruning and General Management of fruit trees, vines, etc., at the time of planting and thruout their later development; the top-grafting of mature trees. Several lessons are given upon the various methods of pruning and training grapes.

Spraying of tree and other fruits for the purpose of combating insect and fungus pests is given special attention. Students are given individual practice in handling the spray pump, and in compounding and applying such preparations as the Bordeaux mixture, kerosene or coal-oil emulsion, etc.

Harvesting, Storing and Marketing of the various fruits grown in Kentucky.

Varieties adapted to soils and climatic conditions in our state, and

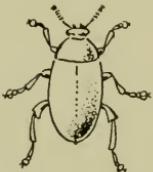
considered further with reference to their various uses at home or for near or distant markets.

(b) **Vegetable Growing and Market Gardening.** On account of the limited time given to the short course, these subjects are treated rather briefly, and mainly with reference to the methods and arrangements most suitable for the farmer's home garden.

(c) **Planting Home Grounds.** A few lectures are given upon laying out home grounds with reference to drives and walks; planning, planting, and subsequent management of windbreaks, shade trees, shrubs, and other ornamental plants, useful in adding comfort and beauty to the farm home as well as increasing its value.

VI. Economic Entomology (Insect Pests)

Miss McCANN.



For the ten weeks' class a special course of instruction is arranged, the object of which is to familiarize the student with a few of the important facts and a little of the language of general entomology, without which he can not understand with accuracy and confidence the statements made by entomologists concerning their work.

The first two weeks will be devoted to the study of the common great divisions of insects,—the more important orders, as they are called,—in which the principal injurious kinds are found, followed with the study of insect transformations,—the changes which insects undergo in completing their life-histories. The study of the life-history of some of the typical injurious species will then be made, and the remainder of the time will be given to the consideration of the principal insect injuries to which crops are liable, and to the use of insecticides. No text-book is required.



SQUAD OF STUDENTS MAKING CEMENT POSTS

VII. Road Construction and Maintenance

PROFESSOR ROWE AND PROFESSOR TERRELL.

Lectures upon Highways and Highway Construction. Road Material, Macadam Roads, Sand Clay Roads, Gravel Roads, Specifications for Roads, Cement Construction, etc.

VIII. Farm Law

JUDGE LAFFERTY.

The course of lectures will be devoted to the careful consideration of those laws which are of special interest in the common experience of the farmer, including under contracts, the legal requirements of buying and selling; real estate and personality; leases, bills, notes and checks; roads and pass-ways; taxation; principles of sales; relation of the farmer with the common carriers; making of wills, relations of landlord and tenant and the legal aspects of trespass.

IX. Weather Forecasting as Related to Farm Practice

MR. NOYES.

The U. S. Weather Bureau has a fully equipped station in the Main Building of the University, and a course of lectures will be given by the Chief Observer, relating to such subjects as the use of the weather map and the interpretation of weather forecasts; personal observations on the part of the individual farmer, upon frosts, rainfall and other weather conditions.

X. Farm Accounts and Business Methods

PROFESSOR MATHEWS AND ASSISTANT.

A simple system of farm accounts will be presented in a few practical lessons, and the importance of business methods on the farm will be discussed. This will also include business correspondence, the filing of letters and accounts, the advantages of utilizing banks, the keeping of farm records, etc.



NORTH DRIVE, UNIVERSITY CAMP

STATE UNIVERSITY ORGANIZATION

The State University, as now organized, comprises six Colleges:

1. THE COLLEGE OF AGRICULTURE.
2. THE COLLEGE OF ARTS AND SCIENCE.
3. THE COLLEGE OF LAW.
4. THE COLLEGE OF CIVIL ENGINEERING.
5. THE COLLEGE OF MECHANICAL AND ELECTRICAL ENGINEERING.
6. THE COLLEGE OF MINING ENGINEERING.

The studies which are comprised within these colleges and schools are distributed into eighteen departments, each in charge of a responsible head, the heads constituting the Faculty. There are thirty additional instructors in these various departments, making a total of forty-eight in the entire corps of teachers.

Each county in the state, is, by law, entitled to have four representatives constantly in the University, free of tuition, one student being appointed each year by the County Superintendent on competitive examination.

County appointees also receive, upon certain conditions, their traveling expenses to and from the University, together with certain other privileges.

Persons desiring catalogs or further information concerning the general courses of the State University should address

PRESIDENT JAMES K. PATTERSON, LL. D.,
Lexington, Ky.

Inquiries relating to either of the courses of the College of Agriculture may be addressed to

PROF. C. W. MATHEWS, Dean.
Lexington, Ky.



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